

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
16 June 2005 (16.06.2005)

PCT

(10) International Publication Number
WO 2005/054489 A1

(51) International Patent Classification⁷:

C12P 13/02

(21) International Application Number:

PCT/EP2004/013253

(22) International Filing Date:

22 November 2004 (22.11.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

0327906.4	2 December 2003 (02.12.2003)	GB
0423342.5	21 October 2004 (21.10.2004)	GB

(71) Applicant (*for all designated States except US*): **CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED** [GB/GB]; Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **ARMITAGE, Yvonne** [GB/GB]; 21 Windmill View, Scholes, Holmfirth, West Yorkshire HD9 1SA (GB). **KULLAR, Jatinder, Singh** [GB/GB]; 62 Whiteways, Off Bolton Road, Bradford, West Yorkshire BD2 4BJ (GB).

(74) Common Representative: **CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED**; Cleckheaton Road, Low Moor, Bradford, West Yorkshire BD12 0JZ (GB).

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

A1

WO 2005/054489

(54) Title: MANUFACTURE OF AMIDES

(57) Abstract: A method of producing an amide from the corresponding nitrile comprising the following steps, i) providing a microorganism capable of producing a nitrile hydratase biocatalyst, ii) culturing the microorganism in a growth medium, iii) storing the microorganism, iv) contacting the nitrile by the microorganism in an aqueous medium and thereby converting the nitrile to the amide, wherein the microorganism is stored as non actively growing free cells in a storage medium that comprises water. The stored microorganism may be as whole microbial cells, this may be in the form of a cell paste recovered from a fermentation medium; an aqueous suspension of the microbial cells, prepared using a suitable suspending medium such as water, physiological saline solution, or a suitable buffer solution, such as phosphate or comprises the fermentation broth that contains components of the fermentation culture medium and products of microbial culture. The microorganism exhibits no significant loss of activity, for example if stored even for at least 2 days, especially 3 to 28 days.